

ABSTRACT OF THE DISCLOSURE

A porous protective sheath for active extraction media used in solid phase microextraction (SPME). The sheath permits exposure of the media to the environment without the necessity of extending a fragile coated fiber from a protective tube or needle. Subsequently, the sheath can pierce and seal with GC-MS septums, allowing direct injection of samples into inlet ports of analytical equipment. Use of the porous protective sheath, within which the active extraction media is contained, mitigates the problems of: 1) fiber breakage while the fiber is extended during sampling, 2) active media coating loss caused by physical contact of the bare fiber with the sampling environment; and 3) coating slough-off during fiber extension and retraction operations caused by rubbing action between the fiber and protective needle or tube.